Is there a communication between the primary lymphatic radicles and those of the blood capillaries? At the beginning of his studies on the absorbent vessels, M. Sappey believed it, and developed this opinion in his works. In admitting this communication and supporting it, he acted on general considerations deduced from normal and pathological anatomy; he had no observed fact to support this view. But he now declares that by a certain procedure the closest *connections* of the lymph and blood capillaries can be seen. The latter are of so large a calibre as compared with the former that they may be likened to the trunks of trees, and the lymph capillaries to climbing plants embracing all parts of the tree, the lacunæ representing the leaves of the climbing plants. When a preparation is examined at the moment of immersion in the reagent for bringing out the lacunæ, at first the blood capillary only is seen. Then, under the influence of the reagent, lacunæ appear here and there: the blood capillary gradually disappears as the lacunæ become more and more visible. During this successive appearance and disappearance of the lymph and blood capillaries, there is a moment when the observer can distinguish, at the same time, the two kinds of vessels, and in the best conditions for observing their communications if they exist. But even in these favourable conditions it has so far been impossible for him to see the slightest communication between them. From these new and concise facts, and apart from all deductions, he concludes that there is no reason for admitting an intercommunication; the lymphatic vessels are hermetically sealed. Blood plasma penetrates the primary radicles by simple transudation or by capillarity, by undergoing only slight modifications.

The histological characters of the primary radicles differ according as one considers the network of the lacunæ and minute capillaries or the subjacent network. The superficial network is composed of an *ensemble* of cavities, the walls of which have, apparently, no endothelial cells. Nitrate of silver, which acts so readily in bringing out these cells in other parts of the circulatory apparatus, has no effect on the minute capillaries and the lacunæ. Their walls are formed simply of an amorphous (structureless?) membrane. The collecting network under the preceding has a more complex texture. On the vessels composing it are seen endothelial cells easily shown by nitrate of silver. These cells form a continuous sheath which lines the internal surface of the proper or structureless membrane. The wall of the sub-papillæ vessels or collectors is composed, then, of two layers. As to the existence of a muscular structure in these two layers, M. Sappey cannot speak with certainty. He has not seen the slightest trace of such structure, and from a uniform failure to see it after repeated trials he thinks that he is justified in saying that no such structure exists at the origin of the lymphatic vessels nor for some distance from their origin.—*L' Union Méd.*, June 23, 1883.

A New Centre of Vision in the Human Eye.

For a long time M. DELBŒUF has observed that sensibility for light is greater at the periphery than at the centre of the retina. If one uses a vacillating flame, such as given by a candle, it will be seen that, though there may be but little light on the book or paper immediately before the eye, there is a dazzling, sometimes almost insupportable glare, on the other white papers on the table, seen by indirect vision. Or the reader may turn his back to the window, holding in the hand a white paper almost horizontally, and a slightly movable shadow is seen projected on the paper, the movements of the shadow being more visible if the eyes are directed to the top or the sides.

After a series of experiments on this subject M. Delbœuf draws the following conclusions:—

1. The macula lutea, of which the visual acuity is greater than that of any other part of the retina, has less sensibility for the differences of brightness.

2. The part of the retina most sensible to luminous differences is a line situated in the vertical meridian, and commencing about 30° from the macula lutea, and extending, in most of the eyes examined, as far as 60° and over, from it.

3. Beyond this line the sensibility goes on decreasing, but in such a manner that the maximum lines of each meridian enclose the macula lutea, remaining within the limits of 30°–20° of it.

4. The sensibility is, generally speaking, greater in the internal and superior demi-meridians.

5. Save personal differences, the two eyes appear to be organized symmetrically as far as this special sensibility is concerned.—*Revue Scientifique*, August 11, 1883.

Kymographic Measurements in Men.

Of all the methods, says Prof. E. ALBERT, of Vienna, which have hitherto been employed for determining the blood-pressure and obtaining true traces, the registering kymographion of Ludwig is the best and most productive of true results. Heretofore, experiments with this instrument have only been made on animals. Dr. Albert has recently, however, recorded cases in which the experiment was made on the human subject, before amputation of a limb. A disinfected canula was bound into a vessel. All the experiments were made in cases in which the thigh or the leg had to be amputated. The experiment only lasted a few minutes in most of the cases. The vessel chosen was the anterior tibial artery, on account of the ease with which it could be reached. The subject was slightly narcotized, the instrument applied, and the anæsthetic removed while the tracing was taken. In one case there was an abnormality of the heart; the tracings in this case had a special value.

The tracings taken by Prof. Albert oppose the assertions of Schapiro and Thomayer that the blood-pressure is higher in the erect than in the sitting posture. The blood-pressure was regularly increased when the epigastrium of the patient was raised. It is possible that when the upper part of the body was raised up the abdominal viscera were pressed on, and a portion of their blood sent into the right heart, by which the pressure was raised. In the erect position it may be possible, on the other hand, that so much blood is collected in the veins of the abdominal viscera and upper extremity that the aortic pressure is lowered. The blood-pressure during the passive upright position of the upper part of the body was between 10 and 20 mm. of mercury, and remained so as long as the subject was left in that position. Even a very slight elevation of the body gave a different result. In one case the pressure was raised when the subject coughed, which explains why the act of coughing may produce hæmoptysis. It may be mentioned, also, that morphine not only allayed the cough irritation, but lowered the blood-pressure. In two cases in which the other lower extremity was enveloped by an Esmarch's bandage during the experiment the blood-pressure was raised about 15 mm. As a rule there was but slight variation during the respiratory act; only in a few cases was there marked indication of the respiratory rhythm. This may be partially explained by the fact that the breathing of the patient was very quiet. This regular blood-pressure under the anæsthetic indicates that the present methods of producing narcosis are approaching perfection. Three plates are given, indicating some of the results obtained. The mean blood-pressure in six cases was between 100 and 160 mm.—*Medizin. Jahrbücher*, 1883, Hft. ii.